Gary S. Firestein et al. Application No.: 10/716,647

Filing Date: November 18, 2003

Page 2

## **AMENDMENTS TO THE CLAIMS**

Please amend claims 32, 33, 39, 41, 43, 47, 50, 51, and 53, as set forth below.

Please cancel claims 1-31, 38, 46, and 52.

Please withdraw claims 40, 42, 44, 45, 48, 49, and 54, without prejudice or disclaimer.

The current listing of claims replaces all prior listings.

1 to 31. (Canceled)

32. (Currently amended) A composition comprising a therapeutically effective amount of a nucleic acid with a sequence encoding a polypeptide that promotes apoptosis in mammalian cells,

wherein the [[said]] composition is formulated for administration into an arthritic or inflamed joint in a mammalian subject and for transfection of comprises transfected synoviocytes within said joint containing a DNA vector encoding wild-type p53, wherein the [[said]] synoviocytes express endogenous mutant p53 protein, and wherein the composition is within said amount is effective in reducing signs of arthritis or inflammation upon administration into a joint of a mammalian subject.

- 33. (Currently amended) The composition of claim 32, which induces wherein apoptosis is induced in synoviocytes present in a joint to which it is administered.
- 34. (Previously presented) The composition of claim 32, wherein the nucleic acid is an expression vector in which said polypeptide encoding sequence is operably linked to a promoter that promotes expression of the encoded polypeptide in fibroblast-like synoviocytes.
- 35. (Previously presented) The composition of claim 32, where the nucleic acid is a viral vector.

Gary S. Firestein et al.

Application No.: 10/716,647

Page 3

Filing Date: November 18, 2003

- 36. (Previously presented) The composition of claim 35, wherein the viral vector is an adenovirus vector.
- 37. (Previously presented) The composition of claim 35, wherein the viral vector is replication deficient.
- 38. (Canceled)
- 39. (Currently amended) The composition of claim 36[[2]], wherein the viral vector does not replicate in cells expressing wild-type p53 polypeptide is selected from p53, p21Waf, ras, proteins in the Bax family, and proteins in the ICE family.
- 40. (Withdrawn) The composition of claim 32, wherein the polypeptide is a peptidomimetic or binding agent of p53, p21Waf, ras, a protein in the Bax family, or a protein in the ICE family.
- 41. (Currently amended) The composition of claim 32, wherein the composition is contained within formulated for administration into a joint of a subject having rheumatoid arthritis.
- 42. (Withdrawn) The composition of claim 32, wherein the composition is formulated for administration into a joint of a subject having ankylosing spondylitis, psoriatic arthritis, or inflammatory bowel disease.
- 43. (Currently amended) The composition of claim 32, wherein the subject is formulated for administration to a human subject.

Gary S. Firestein et al. Application No.: 10/716,647

Filing Date: November 18, 2003

Page 4

- 44. (Withdrawn) A method for promoting apoptosis in synoviocytes in an inflamed joint in a mammal, comprising administering a composition according to claim 32 into said joint.
- 45. (Withdrawn) A method for treating rheumatoid arthritis in a mammalian subject, comprising administering to into an arthritis joint in said subject a composition according to claim 32.
- 46. (Canceled)
- 47. (Currently amended) The composition of claim 35, wherein the viral vector is an adeno-associated virus (AAV) vector or adenovirus vector.
- 48. (Withdrawn) A composition comprising:
  - a) a plurality of a nucleic acid vector for expressing a polypeptide that promotes apoptosis in mammalian cells; and
  - b) a plurality of fibroblast-like synoviocytes; wherein the amount of said vector in the composition is sufficient to reduce the number of said fibroblast-like synoviocytes in the composition.
- 49. (Withdrawn) The composition of claim 47, further comprising a plurality of macrophage-like synoviocytes.
- 50. (Currently amended) The composition of claim 47, wherein the synoviocytes are [[said]] fibroblast-like synoviocytes [[are]] present in synovial tissue.
- 51. (Currently amended) The composition of claim 47, wherein said vector is an adenovirus or AAV vector.

In re Application of:

Gary S. Firestein et al.

Application No.: 10/716,647 Filing Date: November 18, 2003

Page 5

- 52. (Canceled)
- 53. (Currently amended) The composition of claim 47, wherein the adenovirus vector comprises a mutant p19 gene the polypeptide is a protein selected from the group consisting of p53, p21-Waf, ras, proteins of the Bax family, and proteins of the ICE family, or is a peptidomimetic or binding agent of any protein thereof in said group.

Attorney Docket No. UCSD1160-4

54. (Withdrawn) A host cell transfected with a nucleic acid vector for expressing a polypeptide that promotes apoptosis in said cell, wherein the cell is a fibroblast-like synoviocyte.